

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 12341 (FIFTH REVISION)

EXPIRATION DATE: October 31, 2017

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Space Systems/Loral Palo Alto, CA

2. PURPOSE AND LIMITATION:

- a. This special permit authorizes the transportation in commerce of a Space Systems/Loral FS-1300 series satellite assembly containing non-DOT specification pressure vessels pressurized with certain Division 2.2 materials. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
- c. No party status will be granted to this special permit.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.302a in that a non-DOT specification pressure vessel is not authorized, except as specified herein.

- 5. <u>BASIS</u>: This special permit is based on the application of Space Systems/Loral dated September 9, 2013, submitted in accordance with § 107.109.
- 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Helium compressed	2.2	UN1046	N/A
Nitrogen, compressed	2.2	UN1066	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are non-DOT specification pressure vessels which are part of a Space Systems/Loral FS-1300 series satellite assembly described in SS/L's application.

(1) The containers are:

- (i) Propellent Tanks (Loral Part Nos. E033099-01, E130999): Welded Titanium Alloy 6AL-4V spheres. The tanks are 49 inches in diameter and designed and tested for a maximum working pressure of 250 psig as per SS/L Specifications SE E023984 or SE E142122 and information provided in SS/L's application on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD). The tanks may not be charged to a pressure exceeding 50 psig during transportation.
- (ii) Pressurant Tanks (Loral Part No. E033675-01): Aluminum Alloy 6061-T6 cylinder with graphite-epoxy composite (Kevlar 49) over wrap, fitted with end bosses. The tanks are 13 inches in diameter and 30.8 inches long, designed and tested for a working pressure of 4000 psig per SS/L Specification SE E023999 and information provided in SS/L's application on file with the OHMSAPD. The tanks may not be charged to a pressure exceeding 400 psig during transportation.

b. OPERATIONAL CONTROLS: The satellite must be shipped in the Satellite Container Shown on SS/L drawing 37957 on file with the OHMSAPD.

8. SPECIAL PROVISIONS:

- a. The transportation of the satellite shipping container authorized under this special permit is limited to the following movements:
 - (1) From Space Systems/Loral's facility in Palo Alto, California to:
 - (i) The Jet Propulsion Laboratory facility in Pasadena, California by dedicated motor vehicle and return;
 - (ii) The Boeing Aerospace facility in Kent, Washington by dedicated motor vehicle and return;
 - (iii) The Boeing Aerospace facility in Seal Beach, California by dedicated motor vehicle and return;
 - (iv) The Lockheed Martin facility in Sunnyvale, California by dedicated motor vehicle and return;
 - (v) The Arnold Defense Center in Nashville, Tennessee by dedicated motor vehicle and return.
 - (vi) Cape Canaveral Air Station in Titusville, Florida via Moffett Naval Air Station in Mt. View, California. Ground transport must be by dedicated motor vehicle. Transportation from Moffett Naval Air Station to Cape Canaveral Air Station must be by United States Air Force (USAF) aircraft.
 - (vii) Cape Canaveral Air Station in Titusville, Florida via Astrotech facility in Titusville, Florida by dedicated motor vehicle and return.
 - (viii) The SeaLaunch Home Base in Long Beach, California from either: Los Angeles International Airport, John Wayne Orange County Airport, or Long Beach Airport. Air Transportation must be by USAF aircraft. Ground transportation within any segment must be by dedicated motor vehicle.

- (2) From Cape Canaveral Air Station in Titusville, Florida to the Astrotech facility in Titusville, Florida by dedicated motor vehicle and return.
- b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- c. MARKING The satellite shipping container must be marked "DOT-SP 12341" on two opposite sides in letters at least 2 inches in height on the contrasting background.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo aircraft only.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft and motor vehicle used to transport packages covered by this special permit. The shipper shall furnish a current copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et</u> seq:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 $\underline{\text{et seq.}}$, when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by '' 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

Dud By

for Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm
Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: SS/TG